

ABSTRACT

The technique of the invention manufactures a gas storage tank, which includes a gas absorbent/adsorbent and is capable of storing a high-pressure gas. The manufacturing process of a hydrogen storage tank first assembles a heat exchanger unit and packs the particles of hydrogen storage alloy into the heat exchanger unit. The manufacturing process then blocks hydrogen storage alloy filling holes used for packing the hydrogen storage alloy in the heat exchanger unit and attaches a detachable cover member to a hydrogen inlet. The manufacturing process subsequently locates the heat exchange unit filled with the hydrogen storage alloy in a cylindrical tank and narrows both ends of the tank to form joint openings. The manufacturing process then heat-treating the tank under water cooling and detaches the cover member. The manufacturing process attaches joint assemblies to the joint openings and forms a reinforcement layer around the outer circumference of the tank to complete the hydrogen storage tank.